DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

JUN 24 2005

The Honorable William M. Thomas
Chairman
Committee on Ways and Means
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for your letter in which you seek our assistance in moving the Medicare program toward value-based purchasing. We share your goal of providing payments that help reshape the way we deliver health care in this country to provide better support for greater quality and fewer unnecessary costs, and improved health. We are committed to working with the Congress, the provider community, and other stakeholders to develop reporting and payment systems that enable us to support and reward quality.

At present, the Medicare program uses eleven different fee schedules or prospective payment systems to pay claims for services from over one million health care providers. As you mentioned, these fee-for-service payment systems pay physicians and other health care providers based on the number and complexity of services provided to beneficiaries, regardless of their quality, efficiency, or impact on health outcomes.

As a result, our payment systems often have the effect of directing more resources to delivering care that is not of the highest quality, such as duplicative tests and services, as well as hospital admissions or visits to treat potentially avoidable complications. Conversely, providers who have good ideas and want to take action to improve quality of care find that Medicare's payment systems do not provide them with the resources or the flexibility needed to do so. As a result, providers are unable to invest in activities that, properly implemented, have the potential to improve quality and avoid unnecessary medical costs. Such activities could include patient help lines, health information technology (HIT) systems that help patients with chronic diseases understand how they can prevent complications that result in costly hospitalizations and doctor visits, or reminder systems for using preventive services. Linking a portion of Medicare payments to valid measures of quality and effective use of resources would give providers more direct incentives and financial support to implement the innovative ideas and approaches that actually result in improvements in the value of care that our beneficiaries receive.

In his FY 2006 Budget, the President recognized the need for payment reforms to improve the value of care delivered to Medicare beneficiaries. Such reforms would build on the action the Administration has already taken to promote quality by using data from Medicare providers to construct publicly available measures. The Medicare Payment Advisory Commission (MedPAC) also offered several recommendations in its March 2005 Report to Congress to

promote value-based purchasing. We generally support MedPAC's goals in this area, and we are working actively with many outside organizations, particularly in provider-led efforts, to achieve higher quality and better use of resources.

Please find below summary responses to each of the questions you raised in your recent letter. Where applicable, we have also attached additional, more detailed material.

Development of Quality Indicators. The foundation of effective pay-for-performance initiatives is collaboration with providers and other stakeholders, to ensure that valid quality measures are used, that providers are not being pulled in conflicting directions, and that providers have support for achieving actual improvement. Consequently, to develop and implement these initiatives, CMS is collaborating with a wide range of health care providers, other public agencies, and private organizations who share our goal of improving quality and avoiding unnecessary health care costs. Enclosure 1 provides more detail about our efforts to work with hospitals, skilled nursing facilities, home health agencies, end stage renal disease (ESRD) facilities, and physicians to develop measures.

The healthcare community has already exhibited leadership and interest in quality measurement, public reporting, and paying for performance. We have heard repeatedly from individual providers and provider organizations around the country about their desire to support the development and implementation of appropriate measures and payment methods and to participate in well-designed initiatives in this area. We will continue to work with health care providers and Medicare beneficiaries to make further progress on these efforts.

To date, we have worked with the Hospital Quality Alliance (HQA) in the selection of a starter set of ten consensus-derived hospital performance measures for public reporting. Consensus around these measures was achieved because these measures are widely viewed as meaningful elements of quality, they are clinically valid, and they are feasible and not too costly to collect. These are the same measures that were established under section 1886(b)(3)(B)(vii)(II) of the Social Security Act, as added by section 501(b) of the Medicare Modernization Act (MMA). It is important to note that most hospitals are already reporting a larger set of clinical quality measures than were required by the MMA, and that we expect to expand these measures further in the coming year to include standardized measures of quality from the beneficiary's perspective and outcome measures, such as those related to post-surgical complications.

CMS has also been working closely with consumer groups and nursing home leaders through the Nursing Home Quality Initiative, a collaborative effort to improve quality of care in nursing homes. A key element of this effort is the development and improvement of specific quality measures. Currently, we publicly report 15 measures of nursing home services that are submitted by facilities via the Minimum Data Set (MDS). The quality measures were endorsed by the consensus process of the National Quality Forum (NQF). The nursing home industry, patient advocacy groups, and other stakeholders are working with us to improve these measures, while we build a more robust set of measures. For example, in our recent proposed rule for

payment of skilled nursing facilities, we sought comment on additional quality measures and the design of incentives for superior performance. In fact, we are collaborating to assess and develop possible pay-for-performance models, and have recently contracted with Abt Associates to develop a potential demonstration project in this area.

CMS has also been collaborating with provider groups and other stakeholders involved in home health care and care for patients with end stage renal disease. In the home health care setting, CMS now receives quality data regarding the status of a patient's physical and mental health, maintenance or improvement in the patient's ability to perform basic daily activities, and patient medical emergencies. The home health measures are based on information collected on Medicare or Medicaid patients who receive care at a Medicare certified home health agency. For dialysis facilities, CMS's Clinical Performance Measures (CPM) Project currently monitors 16 quality measures that report the quality of dialysis services in three areas: the adequacy of hemodialysis and peritoneal dialysis; anemia management; and vascular access management. In addition, CMS currently collects data on patient nutrition, and is developing additional measures related to kidney transplant referral and end stage renal disease bone metabolism.

We have also made substantial progress with physician groups and other stakeholders on the development and use of measures for physician-related services. Measures of the quality of ambulatory care have been identified through collaboration between CMS, the American Medical Association's Physician Consortium for Performance Improvement, and the National Committee for Quality Assurance (NCQA). This collaboration resulted in a set of proposed measures that are currently being considered for endorsement by the NQF. As part of the Ambulatory care Quality Alliance (AQA), CMS and other stakeholders, including the American College of Physicians, the American Academy of Family Practice, and other physician groups, as well as representatives of private health plans, selected a subset of these measures as a starter set for implementation. These measures cover diabetes, heart disease, asthma, and preventive screening. These measures are already in use in an ongoing Medicare demonstration project.

The entire starter set of ambulatory care measures are now in the final stages of endorsement. These measures are designed to reflect performance in primary care and may also apply to some specialists as well, insofar as specialists are involved in the furnishing of primary care to patients with common chronic diseases, including diabetes and heart disease. In addition, measures of effectiveness and safety of some surgical care have been developed through collaborative programs like the Surgical Care Improvement Program, which includes the American College of Surgeons. We are also collaborating with many specialty societies to develop quality measures that reflect important aspects of the care of specialists and sub-specialists. For example, we are working closely with oncologists to develop measures of the adequacy of treatment planning and follow-up that oncologists furnish as part of their evaluation and management services; with cardiologists on measures of cardiac care for heart attack or heart failure conditions; and with cardiovascular surgeons on measures related to cardiac surgery.

While these collaborative processes have already resulted in clinically valid quality measures for many physician specialties, some specialty societies report that they are still in the development stage, and a few are not reporting any activity. The progress of many specialties to date clearly indicates broad interest, from CMS and other key stakeholders and consensus groups like the

NQF, to support the efforts of specialty societies to develop and refine their measures. As we have indicated, we are pleased to work with any medical specialty to support their quality measurement and improvement efforts. Enclosure 2 provides a list by specialty of the types of quality measures that have been developed or are under development. A preliminary assessment indicates that the specialties for which some measures have been developed account for about half of Medicare physician spending. Specialties accounting for another 40 percent of physician spending have measures under development.

In addition, virtually all specialties have noted that evidence-based guidelines for best practices have been developed for many important aspects of the care they provide. Such guidelines do not apply to all patients receiving care from a particular specialty, but they do generally reflect the state of medical evidence about what works best in the specialty for many of the common problems they treat. Some have suggested that, while they work to develop more specific clinical quality measures, a useful interim indicator is physician reporting on whether a relevant practice guideline was followed for the care of a patient (and possibly, a reason for not following a relevant guideline). A number of private-sector efforts are implementing such approaches now with the goal of improving quality, with some promising results. Such data also help identify circumstances where better medical evidence is needed to help improve practices, another key step for achieving quality improvement. In addition, there is some evidence that compliance with such guidelines may lead not only to better quality but also to better use of resources.

We are exploring methods of reporting physician quality measures through claims and other methods. Many measures with clinical aspects can be reported through existing data systems. For example, in the current oncology demonstration project, physicians are assessing the symptoms of Medicare beneficiaries who are receiving chemotherapy using validated, widely accepted symptom questionnaires that focus on nausea and vomiting, pain, and fatigue. The physicians participating in the demonstration project report on the patients' symptoms via the existing Medicare claims system. Such a reporting mechanism could potentially be used for other specialties, whether for reporting patient symptoms, or for reporting on evidence-based practices that enhance the quality of care.

Systems for Reporting and Analyzing Quality Indicators. Implementing measures in a pay-for-performance system will require infrastructure that can obtain appropriate information from providers, store and aggregate it as necessary, and prepare it for use in payment systems. Over the past few years, CMS has developed an infrastructure that can serve to collect data for quality measurement purposes via secure channels for its submission, storage, analysis, validation, and reporting. The consistent construction and analysis of hospital quality measures based on reported quality data from nearly all hospitals illustrates the key aspects of such systems. Similar tools can be applied in other settings, such as ambulatory care.

To submit data on quality measures, hospitals employ either Joint Commission on Accreditation of Healthcare Organizations (JCAHO) Performance Measurement System vendors or the CMS Abstraction and Reporting Tool (CART). CART is a broadly-applicable software tool that providers and their designees can use to abstract clinical data needed for quality measures from medical records. This tool was designed and developed by CMS with input from JCAHO and the Quality Improvement Organizations.

CMS has also developed a system for secure, HIPAA-compliant transmission of clinical quality data on hospital care for the consistent construction and validation of quality measures. Hospital data is submitted via QNet Exchange—the CMS-approved electronic system for secure communications and data exchange—to a national data repository for private healthcare data. Currently this repository contains information on the ten measures collected pursuant to section 501(b) of the MMA plus the growing number of additional measures collected under the Hospital Quality Alliance Initiative. Data can be submitted at any time throughout the year, but there is a deadline for submission of each quarter's hospital discharges.

After the data are received in a valid format, the measures are calculated by editing the data against appropriate logic to assure valid measure development. This logic, specified by a diverse group of Federal and non-government clinical experts, includes medical procedure and condition codes, exclusion criteria, and other empirically based measure-specific rules. Data submitted by hospitals are also validated through independent abstraction of medical records by a CMS contractor, the Clinical Data Abstraction Center. Hospitals have an opportunity to review the results for 30 days before they are posted.

Size of Incentives Needed to Encourage Reporting. The experience with section 501(b) of the MMA and other programs suggests that limited adjustments in payment rates may be sufficient incentive to encourage providers to perform well on measured aspects of performance. Section 1886(b)(3)(B)(vii)(II) of the Social Security Act, which was added by section 501(b) of the MMA, requires a 0.4 percentage point higher payment update for acute care hospitals that submit information on ten measures of quality for each of fiscal years 2005, 2006, and 2007. If a hospital provides the information by a specific date in the prior year, the full update applies to all inpatient discharges from that hospital during a subsequent fiscal year. Nearly every eligible hospital in the country was willing and able to submit the required data in order to qualify for full update—a clear indication that well-defined incentives can bring about appropriate system change.

Further, CMS has partnered with Premier Inc., a nationwide alliance of not-for-profit hospitals, to conduct a demonstration program designed to improve the quality of inpatient care for Medicare beneficiaries by providing financial incentives. Payment adjustments under the demonstration will be provided to hospitals scoring in the top 20 percent for a given set of quality measures—an additional 2 percent on top of the normal DRG payment will be made to hospitals scoring in the top 10 percent, and an additional 1 percent payment will be made to hospitals in the next highest 10 percent. In the third year of the demonstration, hospitals that do not achieve significant absolute improvements above the demonstration baseline will be subject to reductions in payments. Preliminary results released in May show that these modest payment adjustments are sufficient to drive quality improvement. This project further validates the fact that payment incentives are bringing about real, meaningful change. We are encouraged by these early results and are using this effort to begin laying the foundation for a pay for quality program for all hospitals.

The Physician Group Practice Demonstration project presents another example. This project is designed to test pay-for-performance in Medicare's fee-for-service payment system for physicians. The project is assessing the ability of ten large, multi-specialty physician groups to

improve care that could result in better patient outcomes and efficiencies. Participating physician groups will continue to be paid on a fee-for-service basis, but they are earning performance-based payments of up to several percent (up to 5 percent of their performance target) for implementing care management strategies that anticipate patients' needs, prevent chronic disease complications, avoid hospitalizations, and improve the quality of care. The performance payment will be derived from savings in total Medicare benefits achieved by the physician group for its patient population and paid out in part based on the quality results.

CMS is also designing a pay-for-performance demonstration project to improve the quality and efficiency of care for chronically ill Medicare beneficiaries treated in small- and medium-sized physician practices, by providing assistance in adopting and using effective health information technology. The Medicare Care Management Performance Demonstration project will provide quality reporting and performance payments to physicians who meet or exceed performance standards in clinical delivery systems and patient outcomes, and will reflect the special circumstances of smaller practices. This demonstration is under development and will be implemented in Arkansas, California, Massachusetts, and Utah. Participating practices will receive technical assistance from the Quality Improvement Organizations in their areas, as well as bonus payments for achieving the project's objectives.

Resource Use. Measures of physician resource use have been used and are being developed by a number of public and private entities. In its March 2005 Report to Congress, MedPAC recommended that the "Secretary should use Medicare claims data to measure fee-for-service physicians' resource use and share results with physicians confidentially to educate them about how they compare with aggregated peer performance." CMS is preparing to implement the MedPAC recommendation in the near future on a pilot basis, using information derived from claims data. We are using existing claims data to simulate and test the measurement and quantification of individual physician patterns of practice, incorporating both services they order (including facility services) as well as services they furnish. As a next step, soon we expect to begin sharing the results with physicians confidentially to educate them about how they compare to peers.

CMS Demonstrations. As I have noted above and also as we have described in more detail in Enclosure 3, we are conducting a number of demonstrations and piloting various payment reforms to reward providers for better quality, better patient satisfaction, and lower overall health care costs in the Medicare fee-for-service program. Building on these initiatives, we recognize that many of the best opportunities for quality improvement cut across settings of care. We have projects in operation or in the advanced planning stages in the fee-for-service sector that will use standard quality measures to support better care coordination and continuity for beneficiaries with chronic illnesses across different care settings. In the Medicare Advantage program, we are moving toward full risk adjustment, which provides more resources to health plans that are able to attract and retain high-cost beneficiaries, thus providing stronger incentives to improve continuity and quality of care, while avoiding unnecessary services. In conjunction with these changes, we are seeing more efforts by Medicare Advantage plans to provide greater continuity of care and support for beneficiaries with predictably high costs, as well as more use of performance-based payments.

We want to build on all of these steps to give providers the support and resources they need to deliver better care and avoid unnecessary costs. Linking a portion of Medicare payments to valid measures of quality, using the kinds of approaches summarized here, would support better health care. These direct incentives would foster the development and implementation of innovative ideas and approaches that will result in improvements in the health care that our beneficiaries receive.

As evidenced by the early work of some of our demonstration projects, and the leadership Congress provided in the MMA creating incentives for hospital reporting, we are seeing meaningful results. These results are a promising foundation to support the most effective clinical and financial approaches to achieve better health outcomes for Medicare beneficiaries. We look forward to continuing to work closely with you and all of our stakeholders to advance these important initiatives to improve quality and avoid unnecessary costs for Medicare beneficiaries and throughout our health care system. I also will provide this response to the cosigner of your letter.

Sincerely,

Mark B. McClellan, M.D., Ph.D.

Enclosure 1

DEVELOPING AND SELECTING STANDARDIZED QUALITY MEASURES

CMS has worked collaboratively with health care providers in an effort to develop measures of quality in various settings and to reduce the burden of their collection.

Development of Hospital Quality Measures

CMS and the Hospital Quality Alliance (HQA), which has representation from consumers, hospitals, practitioners, purchasers, and accreditation organizations, collectively selected a starter set of ten consensus-derived performance measures for public reporting. The measures were endorsed by the National Quality Forum (NQF) through a consensus development process that includes input from consumers, purchasers, clinicians, providers, researchers and quality improvement experts. The NQF is a non-profit organization that represents a broad range of health care stakeholders and provides endorsement of consensus-based national performance standards for measurement and public reporting.

This starter set of measures was incorporated into section 501(b) of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the MMA), which provided a financial incentive for those hospitals that reported these measures. These measures are available at the following link on the CMS website: http://www.cms.hhs.gov/quality/hospital/StarterSet.pdf. On April 1, 2005, we launched the Hospital Compare website, which allows comparison of data on these measures from over 4,200 hospitals.

CMS and the HQA have identified an expanded set of measures that hospitals may choose to report without payment ramifications. An additional seven measures were released on April 1, 2005. These measures are available at the following link on the CMS website: http://www.cms.hhs.gov/quality/hospital/HospitalQualityMeasures.pdf. An additional five measures have been endorsed by the NQF and are due to be released later this year.

Development of Nursing Homes Measures

CMS currently uses data submitted via the Minimum Data Set (MDS) by facilities to produce 15 measures, endorsed by the NQF, for public reporting on Nursing Home Compare. These measures are available at the following link on the CMS website: http://www.cms.hhs.gov/quality/nhqi/Snapshot.pdf.

CMS has been working closely with consumer groups and nursing home leaders through the Nursing Home Quality Initiative, a collaborative effort to improve quality of care in nursing homes. A key element of this effort is the development and improvement of specific quality measures. In addition to the 15 measures reported via the MDS, we are considering expanding this starter set to include measures that assess safety, patient functional status, patient experience, and personnel management. Safety measures would assess adverse events, such as inappropriate medication use or falls and other injuries. In addition, recent research has identified additional measures to assess functional status in short-stay Medicare patients, although many of the

measures also reflect care provided to long-term patients as well. We are also interested in measuring the experience of care from the perspective of both patients and their families. Other possible measures might include assessing such items as: nursing home staff turnover rates; nursing director tenure; and staff immunization rates. Further, in its March 2005 report, MedPAC recommended the collection of data on a few admissions and discharge measures in order to provide insight into whether treatment goals (particularly for functional status) were met.

Development of Home Health Measures

Similar to the nursing home quality activities, CMS has also been working with leaders and advocates for the home health industry through our Home Health Quality Initiative. Under this initiative, measures are reported to CMS that provide information on how well the home health agencies provide care. Examples include: the status of a patient's physical and mental health; maintenance or improvement in the patient's ability to perform basic daily activities; and patient medical emergencies. These measures are based on information collected on Medicare or Medicaid patients who receive care at a Medicare certified home health agency.

In its March 2005 report, MedPAC recommended using the outcomes-based quality indicators (OBQIs) with appropriate risk adjustment as pay-for-performance metrics. The measures recommended by MedPAC include an assessment in improvement in the lives of home health patients and markers for adverse events that prompt home health agencies and surveyors to investigate further. OBQI measures are now in common use and have been studied for some time. A number of such measures have been endorsed by the NQF and are evidence based, well accepted, and not unduly burdensome. MedPAC has also recommended that an initial set of measures focus on improving patient's health and functioning as well as measures of stabilization, recognizing that often the goal of the home health agency is to simply stabilize the patient's condition.

Development of Dialysis Facility Measures

Initiated in 1998, CMS's Clinical Performance Measures (CPM) Project currently monitors 16 quality measures that are based on the National Kidney Foundation's Kidney Disease Outcomes Quality Initiative (K-DOQI) Clinical Practice Guidelines. These measures report the quality of dialysis services provided under Medicare in the areas of adequacy of hemodialysis and peritoneal dialysis, anemia management, and vascular access management. In addition to the CPMs, CMS also collects data on patient nutrition and is developing additional measures related to kidney transplant referral and ESRD bone metabolism.

CPM data are collected on a national random sample of adult in-center hemodialysis patients, all in-center hemodialysis patients less than 18 years of age, and a national random sample of adult peritoneal dialysis patients. Thirteen of the CPMs are calculated, and an annual report of these findings is published and made available to the public at the following link: www.cms.hhs.gov/esrd/1.asp. CPM data are not collected in numbers sufficient for calculating dialysis facility-specific rates. However, CMS is currently collaborating with the

dialysis organizations to collect and transmit CPM data electronically on all their dialysis patients. We are also interested in measuring care from the patients' perspective.

Development of Physician Measures

Ambulatory care measures have also been developed by the American Medical Association's Physician Consortium for Performance Improvement, the National Committee for Quality Assurance (NCQA) and CMS. A set of about 99 ambulatory care measures was submitted to NQF for endorsement. These measures are available at the following link on the CMS website: http://www.cms.hhs.gov/quality/AmbulatoryMeasures.pdf. Although the endorsement process is still underway, to date 49 draft ambulatory measures have been endorsed. We expect that the final set will be released in July 2005. In addition, nine final diabetes measures, also known as the Diabetes Alliance measures have been endorsed by NQF.

A starter set of the ambulatory care measures, which is a subset of the measures submitted to NQF, has been developed by the Ambulatory care Quality Alliance (AQA), which is comprised of the Agency for Healthcare Research and Quality (AHRQ), America's Health Insurance Plans (AHIP), American College of Physicians (ACP) and American Family Physicians (AFP). We have been working closely with the AQA to develop this starter set of consensus-derived ambulatory quality measures for physician offices. We are also collaborating with many specialty societies to develop quality measures that reflect important aspects of the care of specialists and sub-specialists. For example, we are working closely with oncologists to develop measures of the adequacy of treatment planning and follow-up that oncologists furnish as part of their evaluation and management services; with cardiologists on measures of cardiac care for heart attack or heart failure conditions; and with cardiovascular surgeons on measures related to cardiac surgery.

Enclosure 2

SPECIALTY SOCIETIES—with Applicable Measures Developed or under Development

Internal Medicine	Applicable measures have been submitted to the National Quality Forum (NQF). The measures are currently in the public comment phase of the NQF process (e.g., Heart Disease: Coronary Artery Disease - percentage of patients who were prescribed a lipid-lowering therapy (based on current ATP III guidelines)). The Ambulatory care Quality Alliance (AQA) starter set of measures are applicable and ready (e.g., Hypertension: percentage of patient visits during which either systolic blood pressure >140 mm Hg or diastolic blood pressure >90 mmHg with documented plan of care for hypertension).
Internal Medicine – Cardiology	The Coronary Artery Disease (CAD) and Heart Failure (HF) measures are applicable and ready (e.g., Heart Failure (HF): percentage of patients who also have LSVD who were prescribed ACE Inhibitor or ARB therapy; percentage of patients who also have LSVD who were prescribed beta-blocker therapy). The specialty society is also developing additional measures.
Radiology	The American College of Radiology has appropriateness criteria for various diagnosis procedures (e.g., chest x-ray, computed tomography (CT) for detection of pulmonary embolism in adults). Measures on appropriateness of tests and appropriate communication of results are under development.
Surgery – Ophthalmology	The specialty society has readily available practice guidelines and summary benchmarks, which outline the process of care elements that are important for quality of eye care (e.g., appropriate management of primary angle open glaucoma; appropriate post-op care for filtering surgery patients; complete post-op examination post cataract surgery). Further, the Academy helped initiate a NCQA performance measure for glaucoma screening consistent with Medicare's new benefit, which was incorporated into HEDIS 2006, and also has contributed to the development of the diabetes eye exam HEDIS measure, which is also part of the AQA's starter set of ambulatory care measures.

Enclosure 2

SPECIALTY SOCIETIES—with Applicable Measures Developed or under Development

Family Practice	Applicable measures have been submitted to the NQF. The measures are currently in the public comment phase of the NQF process (e.g., percentage of patients who received an influenza immunization; percentage of patients who received a pneumococcal immunization; percentage of patients with diabetes with one or more A1C test(s) conducted during the measurement year). The AQA starter set of measures are applicable and ready (e.g., Hypertension: percentage of patient visits during which either systolic blood pressure > 140 mm Hg or diastolic blood pressure > 90 mm Hg, with documented plan of care).
Surgery – Orthopedic	Some Surgical Infection Prevention (SIP) and Surgical Care Improvement Project (SCIP) measures are directed for this specialty (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis). Additional measures include the appropriate diagnosis and treatment of back pain. The specialty society is identifying and developing quality measures, e.g., the society has recently submitted 10 measures to NQF.
Surgery – General	The AV Fistula measure (Fistula First) could be refined for this specialty (e.g., the percentage of patients who have an autogenous arteriovenous fistula for dialysis vascular access). Most SIP/SCIP measures are directed for this specialty (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis).
Internal Medicine – Hema-Oncology	Patient experience of care measures are applicable, ready, and are currently being used in the cancer demonstration program (e.g., percentage of patients reporting pain; percentage of patients reporting nausea/vomiting; percentage of patients reporting fatigue). The specialty society is in the initial stages of developing measures that are related to their practice guidelines.

Enclosure 2

SPECIALTY SOCIETIES—with Applicable Measures Developed or under Development

Emergency Medicine	The majority of the current hospital measures are applicable to emergency room physicians (e.g., aspirin and beta blocker treatment at arrival for acute myocardial infarction).
Internal Medicine – Gastroenterology	Applicable measures include appropriate attention to patient monitoring before, during and after the procedure when using conscious sedation measures; the percentage of patients who had appropriate screening for colorectal screening.
Internal Medicine – Pulmonology	Chronic Obstructive Pulmonary Disease (COPD) measures are applicable (e.g., percentage of patients with COPD who had a spirometry evaluation documented; percentage of patients with systemic corticosteroids for acute exacerbation).
Anesthesiology	Some SCIP measures are applicable (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis). Additional measures include the appropriate evaluation of the patient – pre, during, and post procedure.
Internal Medicine – Neurology	Applicable measures include the appropriate treatment of ischemic stroke; stroke rehabilitation; diagnosis of dementia.
Psychiatry	Applicable depressive measures have been submitted to the NQF. The measures are currently in the public comment phase of the NQF process (e.g., Effective Acute Phase Treatment: percentage of patients who were diagnosed with a new episode of depression and treated with antidepressant medication and remained on an antidepressant for at least 180 days).

Enclosure 2

SPECIALTY SOCIETIES—with Applicable Measures Developed or under Development

General Practice	Applicable measures have been submitted to the NQF. The measures are currently in the public comment phase of the NQF process (e.g., percentage of patients who received an influenza immunization; percentage of patients who received a pneumococcal immunization; percentage of patients with diabetes with one or more A1C test(s) conducted during the measurement year). The AQA starter set of measures are applicable and ready (e.g., Hypertension: percentage of patient visits during which either systolic blood pressure > 140 mm Hg or diastolic blood pressure > 90 mm Hg, with documented plan of care).
Pathology	Practice guidelines are available but appear to be limited to interpretation. Measures on appropriateness of tests and appropriate communication of results are under development.
Internal Medicine – Nephrology	ESRD and DOQI measures currently measure at the facility level but could be readily refined to measure at the physician level (e.g., Regular Measurement of the Delivered Dose of Hemodialysis: the delivered dose of hemodialysis should be measured at least once a month in all adult and pediatric hemodialysis patients).
Physical Medicine and Rehabilitation	Applicable measures include stroke rehabilitation and the prevention of complications.
Internal Medicine – Rheumatology	Applicable measures have been submitted to the NQF. The measures are currently in the public comment phase of the NQF process (e.g., Osteoarthritis: Functional Assessment - percentage of patients diagnosed with symptomatic osteoarthritis that were assessed for function and pain annually).
Surgery – Neurological	Some of the SIP/SCIP measures could be refined for this specialty (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis).

Enclosure 2

SPECIALTY SOCIETIES—with Applicable Measures Developed or under Development

Surgery – Vascular	The AV Fistula measure (Fistula First) could be refined for this specialty (e.g., the percentage of patients who have an autogenous arteriovenous fistula for dialysis vascular access). Some SIP/SCIP measures are applicable (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis).
Surgery – Thoracic/Cardiac	The NQF endorsed Society of Thoracic Surgeons (STS) cardiac surgery measures are applicable (e.g., percentage of patients undergoing isolated coronary artery bypass graft (CABG) who received an internal mammary artery graft). Some SIP/SCIP measures are also applicable (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis).
Obstetrics/ Gynecology	Applicable measures have been submitted to the NQF (e.g., rate of mammography screening; rate of cervical cancer screening).
Surgery – Plastic & Reconstructive	Some SIP/SCIP measures are applicable (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis).
Internal Medicine – Endocrinology/ Diabetes/ Metabolism	The NQF endorsed diabetes measures are applicable and ready (e.g., percentage of patients with diabetes with one or more A1C test(s) conducted during the measurement year).
Critical Care	Applicable measures include the prevention of intra-vascular catheter-related infections; treatment of intra-vascular catheter-related infections; appropriate weaning from mechanical ventilatory support.
Internal Medicine – Geriatric Medicine	The AQA starter set of measures are applicable and ready (e.g., percentage of patients who received an influenza immunization; percentage of patients who received a pneumococcal immunization). Appropriate Assessing Care of Vulnerable Elders (ACOVE) measures for vulnerable elderly (e.g., detecting and treating conditions such as dementia, depression, and functional impairments that are underdetected in the elderly) may also be applicable.

Enclosure 2

SPECIALTY SOCIETIES—with Applicable Measures Developed or under Development

Surgery – Colorectal	Some SIP/SCIP measures are applicable (e.g., prophylactic antibiotic received within one hour prior to surgical incision; surgical patients with recommended thromboembolism prophylaxis).
Nuclear Medicine	Applicable measures regarding the appropriate use of cardiac radionuclide imaging; appropriate protocols; appropriate patient preparation.
Preventive Medicine	Applicable measures have been submitted to NQF (e.g., percentage of patients who received an influenza immunization; percentage of patients who received a pneumococcal immunization; rate of mammography screening; rate of cervical cancer screening).

Enclosure 3

DEMONSTRATIONS AND PILOT PROGRAMS

Premier Hospital Quality Incentive Demonstration. CMS has partnered with Premier Inc., a nationwide alliance of not-for-profit hospitals, to conduct a demonstration program that is designed to improve the quality of inpatient care for Medicare beneficiaries by providing financial incentives. Under the Premier Hospital Quality Incentive Demonstration, about 270 hospitals are voluntarily providing data on 34 quality measures related to five clinical conditions: heart attack, heart failure, pneumonia, coronary artery bypass graft, and hip and knee replacements. Using the quality measures, we will identify hospitals in the demonstration with the highest clinical quality performance for each of the five clinical areas. Hospitals scoring in the top ten percent for a given set of quality measures will receive a 2 percent bonus payment in addition to the normal payment for the service provided for Medicare discharges in the corresponding diagnosis-related groups (DRGs). Hospitals in the next highest ten percent will receive a 1 percent bonus payment. In the third year of the demonstration project, hospitals that do not achieve absolute improvements above the demonstration baseline will be subject to reductions in payments. Preliminary results show that the modest financial incentives under the demonstration are sufficient to drive quality improvement.

Physician Group Practice Demonstration. CMS recently announced a demonstration project to test pay-for-performance in Medicare's fee-for-service payment system for physicians. The Physician Group Practice Demonstration will assess the ability of large physician groups to improve care that could result in better patient outcomes and efficiencies. Ten large (200+ physicians), multi-specialty physician groups in various communities across the nation will participate in the demonstration, which began operations in April 2005. Participating physician groups will continue to be paid on a fee-for-service basis, but they will be able to earn performance-based payments for implementing care management strategies that anticipate patients' needs, prevent chronic disease complications, avoid hospitalizations, and improve the quality of care. The performance payment will be derived from savings in total Medicare benefits achieved by the physician group for its patient population and paid out in part based on the quality results, which we will assess.

Medicare Care Management Performance Demonstration. CMS also plans to test a pay-for-performance system to promote the adoption and use of health information technology to improve the quality and efficiency of care for chronically ill Medicare beneficiaries treated in small- and medium-sized physician practices. The Medicare Care Management Performance Demonstration will provide performance payments for physicians who meet or exceed performance standards in clinical delivery systems and patient outcomes, and will reflect the special circumstances of smaller practices. This demonstration is under development and will be implemented in Arkansas, California, Massachusetts, and Utah. Participating practices will receive technical assistance from the Quality Improvement Organizations in their areas, as well as bonus payments for achieving the project's objectives.

Medicare Health Care Quality Demonstration. CMS is also investigating how to enhance quality and safety in the Medicare Health Care Quality Demonstration. This demonstration program, which was mandated by the MMA, is a five-year program designed to reduce the variation in utilization of heath care services, and to increase quality and efficiency of care by encouraging

area-level collaboration and coordination to improve the use of evidence-based care and overall area quality. We have sought public comment on the design of this demonstration and will consider these comments in a request for proposals. The project will be open to physician groups and other providers that are involved in integrated health care delivery, for example using effective interoperable electronic health information systems that improve quality and avoid unnecessary costs.

Chronic Care Improvement Program. This pilot program will test a population-based model of disease management. Under the program, participating organizations will be paid a monthly per beneficiary fee for managing a population of beneficiaries with advanced congestive heart failure and/or complex diabetes. These organizations must guarantee CMS a savings of at least five percent plus the cost of the monthly fees compared to a similar population of beneficiaries. Payment also is contingent upon performance on quality measures and beneficiaries and provider satisfaction. The program will generate data on performance measures that will be useful in improving the Medicare program as a whole.

Disease Management Demonstration for Severely Chronically Ill Medicare Beneficiaries. This demonstration, which began enrollment in February 2004, is designed to test whether applying disease management and prescription drug coverage in a fee-for-service environment for beneficiaries with illnesses such as congestive heart failure, diabetes, or coronary artery disease can improve health outcomes and reduce costs. Participating disease management organizations receive a monthly payment for every beneficiary they enroll to provide disease management services and a comprehensive drug benefit, and must guarantee that there will be a net reduction in Medicare expenditures as a result of their services. To measure quality, the organizations must submit data on a number of relevant clinical measures.

Disease Management Demonstration for Chronically Ill Dual-Eligible Beneficiaries. Under this demonstration, disease management services are being provided to full-benefit dual eligible beneficiaries in Florida who suffer from advanced-stage congestive heart failure, diabetes, or coronary heart disease. The demonstration provides the opportunity to combine the resources of the state's Medicaid pharmacy benefit with a disease management activity funded by Medicare to coordinate the services of both programs and achieve improved quality with lower total program costs. The demonstration organization is being paid a fixed monthly amount per beneficiary and is at risk for 100 percent of its fees if performance targets are not met. Savings above the targeted amount will be shared equally between CMS and the demonstration organization. Submission of data on a variety of relevant clinical measures is required to permit evaluation of the demonstration's impact on quality.

End Stage Renal Disease (ESRD) Disease Management Demonstration. This demonstration is scheduled to begin later this year and extend for four years. Under this demonstration, organizations serving ESRD patients will receive a capitated payment to test the effectiveness of disease management models in increasing quality of care and containing costs. Eligible organizations will receive capitated payments and accept risk to provide a coordinated care benefit plan to ESRD enrollees. Incentive payments of up to five percent will also be made to plans for achieving quality improvements over the course of the demonstration. Quality measurement will be based on a quarterly submission of patient-level data on five key clinical

indicators profiled in the CMS ESRD Clinical Performance Measures (CPM) Project. Initiated in 1998, the CPM Project currently monitors 16 quality measures that are based on the National Kidney Foundation's Kidney Disease Outcomes Quality Initiative (K-DOQI) Clinical Practice Guidelines. These measures report the quality of dialysis services provided under Medicare in the areas of adequacy of hemodialysis and peritoneal dialysis, anemia management, and vascular access management. In addition to the CPMs, CMS will collect data on patient nutrition and develop additional measures related to kidney transplant referral and ESRD bone metabolism.

Care Management Demonstration for High Cost Beneficiaries. This demonstration, which is approaching implementation, will test models of care management in a Medicare fee-for-service population. The project will target beneficiaries who are both high cost and high risk. The announcement for this demonstration was published in the *Federal Register* on October 6, 2004, and we accepted applications through January 2005. The payment methodology will be similar to that implemented in the Chronic Care Improvement Program, with participating organizations required to meet relevant clinical quality standards for the specific populations they target as well as guarantee savings to the Medicare program.